

From the  
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY  
(PCT Rule 43bis.1)

Date of mailing

(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/IL2004/000918

International filing date (day/month/year)  
05.10.2004

Priority date (day/month/year)  
09.10.2003

International Patent Classification (IPC) or both national classification and IPC  
F41A23/20, F41A23/24

Applicant  
ELBIT SYSTEMS LTD.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office - P.B. 5818 Patentlaan 2  
NL-2280 HV Rijswijk - Pays Bas  
Tel. +31 70 340 - 2040 Tx: 31 651 epo nl  
Fax: +31 70 340 - 3016

Authorized Officer

Menier, R

Telephone No. +31 70 340-4405



Best Available Copy

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

10/574455  
International application No.  
PCT/IL2004/000918

AP20 Rec'd PCT/IL 04 APR 2006

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

---

**Box No. III Non-establishment of opinion with regard to novelty, inventive step and Industrial applicability**

---

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

- ☐ the entire international application,
- ☒ claims Nos. 29, 30

because:

- ☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):
- ☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):
- ☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
- ☒ no international search report has been established for the whole application or for said claims Nos. 29,30
- ☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:
  - the written form ☐ has not been furnished
  - ☐ does not comply with the standard
  - the computer readable form ☐ has not been furnished
  - ☐ does not comply with the standard
- ☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.
- ☒ See separate sheet for further details

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/IL2004/000918

---

**Box No. V Reasoned statement under Rule 43b/s.1(a)(I) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

---

**1. Statement**

|                               |             |                 |
|-------------------------------|-------------|-----------------|
| Novelty (N)                   | Yes: Claims | 10-12,15,16     |
|                               | No: Claims  | 1-9,13,14,17-28 |
| Inventive step (IS)           | Yes: Claims |                 |
|                               | No: Claims  | 1-28            |
| Industrial applicability (IA) | Yes: Claims | 1-28            |
|                               | No: Claims  |                 |

**2. Citations and explanations**

**see separate sheet**

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

PCT/IL2004/000918

IAP20 Rec'd PCT/PTO 04 APR 2006

**Re Item III****Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

Claims 29 and 30 of the application have not been examined because they have not been searched (Rule 6.2(a) PCT).

**Re Item V****Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

- 1 The following objections have been raised in the present communication:

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1-9, 13, 14 and 17-28 is not new in the sense of Article 33(2) PCT.

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 10-12, 15 and 16 does not involve an inventive step in the sense of Article 33(3) PCT.

- 2 Reference is made to the following documents:

D1: EP1191302 A  
D2: EP1128152 A  
D3: DE3518551 A  
D4: WO0188564 A  
D5: DE2205826 A

- 3 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of independent claim 1 is not new in the sense of Article 33(2) PCT.

The document D1 discloses (the references in parentheses applying to this document) a land vehicle weapon system comprising:

a base mount coupled with a land vehicle;  
a weapon mount (1+2) (fig.1,2);  
a plurality of weapons (3) coupled with said weapon mount (1+2) (par.14; fig.1,2);  
a weapon moving mechanism coupled between said base mount and said weapon mount (1+2), said weapon moving mechanism being operable to move said weapons (3) between a plurality of configurations (par.7,20; fig.5,6);  
a plurality of moving elements (1,6,7) coupled with at least one of said base mount, said weapon mount (1+2), said weapons (3), and with said weapon moving mechanism (par.14-16; fig.3);  
a sensing mechanism (4) coupled with at least one of said weapon mount (1+2), said weapons (3) and said base mount (par.8,14; fig.1,2); and  
at least one user interface (B) coupled with said weapons (3), said weapon moving mechanism, said moving elements (1,6,7), and with said sensing mechanism (4), said at least one user interface (B) enabling a user to remotely operate said weapons (3) (par.18; fig.2).

Documents D2, D3 and D5 also disclose such a land vehicle weapon system (D2: abstract; par.1,8,9,10; fig.6,15,17,18; D3: abstract; p.4, l.41-p.7, l.133; fig.1-5; D5: p.1,2; p.3, l.1-4; fig.1-3).

- 4 Dependent claims 2-28 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty or inventive step, the reasons being as follows:
- 4.1 The features of dependent claims 2 and 3 are known from D1 (par.7,20; fig.1,2).
- 4.2 The features of dependent claims 4 and 5 are known from D2 (abstract; par.1).
- 4.3 The features of dependent claims 6-9 are known from D1 (par.8,15).
- 4.4 The features of dependent claims 10-12 are suggested by D3 (p.5, l.68-75; p.6, l.109-112).
- 4.5 The features of dependent claims 13-14 are known from D1 (par.18; fig.2).

- 4.6 The features of dependent claim 15 are suggested by D4 (abstract; p.2, l.23-p.3, l.6).
- 4.7 The features of dependent claim 16 are suggested by D3 (p.5, l.72).
- 4.8 The features of dependent claims 17-19 are known from D1 (par.7,20; fig.1,5,6).
- 4.9 The features of dependent claim 20 are known from D2 (col. 2, l.5-11).
- 4.10 The features of dependent claim 21 are known from D1 (fig.1,2).
- 4.11 The features of dependent claims 22 and 23 are known from D5 (p.3, l.4; fig.3).
- 4.12 The features of dependent claim 24 are known from D1 (fig.4).
- 4.13 The features of dependent claim 25 are known from D3 (p.5, l.68-69).
- 4.14 The features of dependent claim 26 are known from D1 (fig.5,6).
- 4.15 The features of dependent claims 27 and 28 are known from D2 (fig.17,18).

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☒ FADED TEXT OR DRAWING
- ☒ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☒ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☒ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**